



STATE OF MARYLAND

DMMH

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September 16, 2011

Public Health & Emergency Preparedness Bulletin: # 2011:36 Reporting for the week ending 09/10/11 (MMWR Week #36)

CURRENT HOMELAND SECURITY THREAT LEVELS

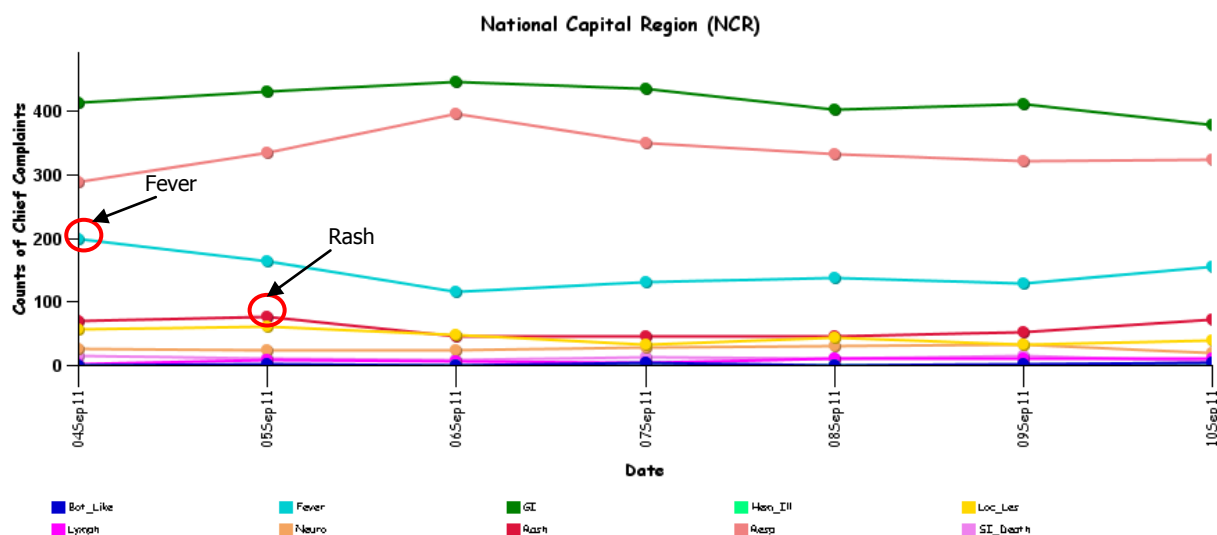
National: No Active Alerts
Maryland: Level One (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

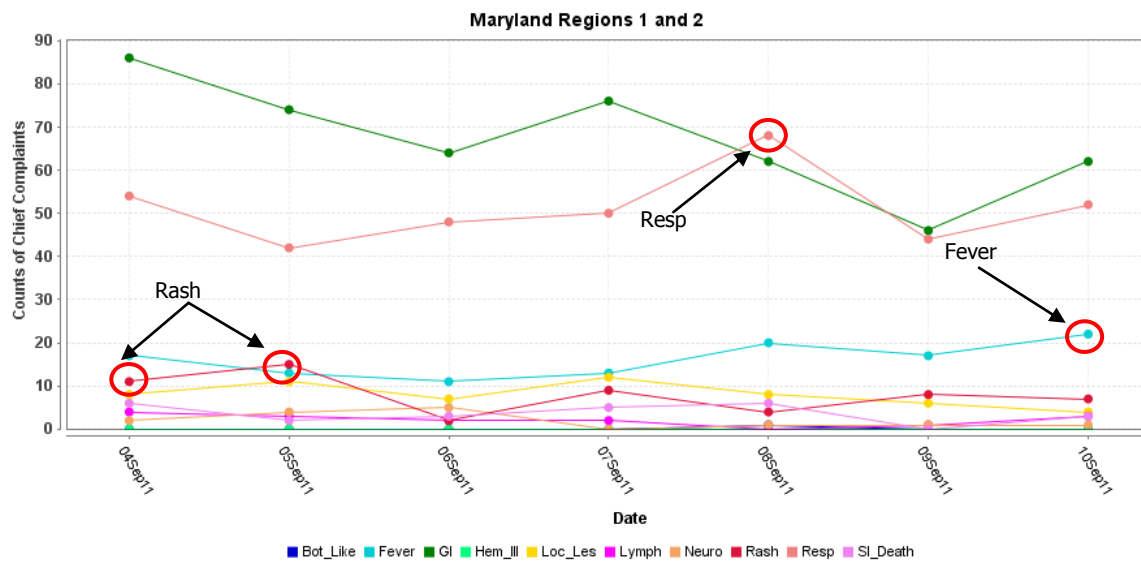
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

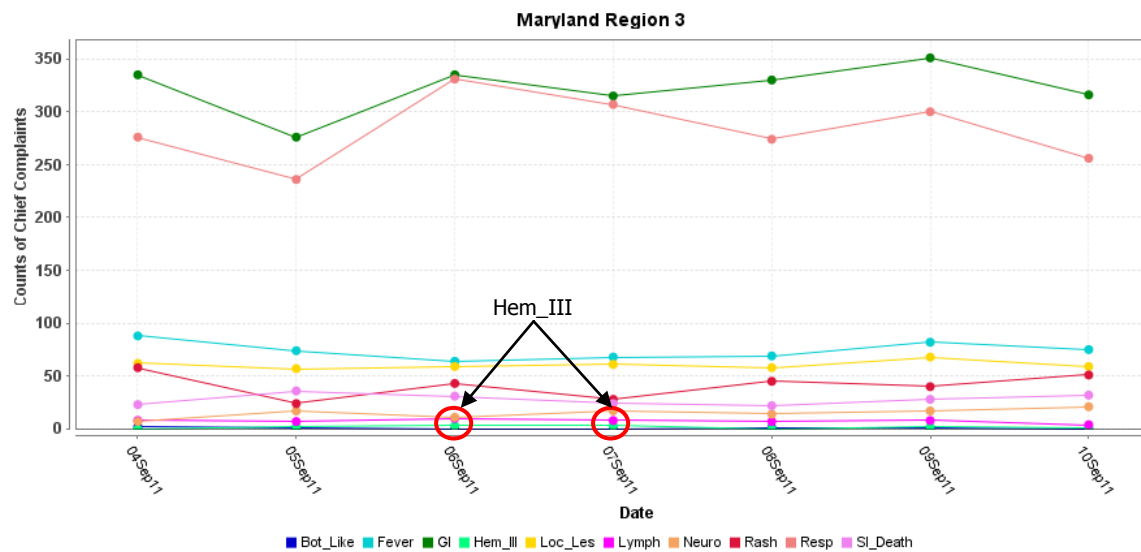


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

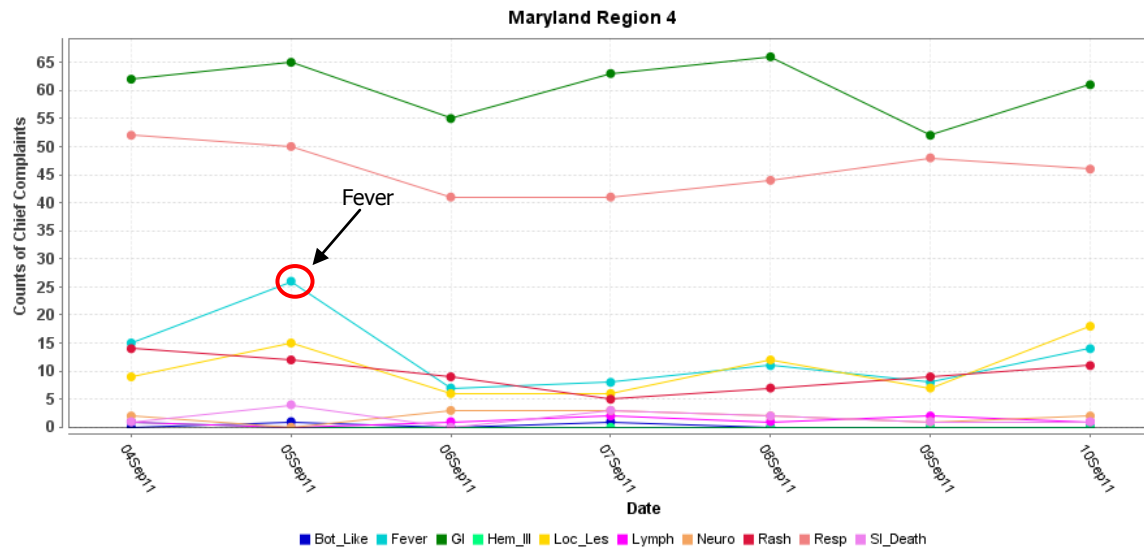
MARYLAND ESSENCE:



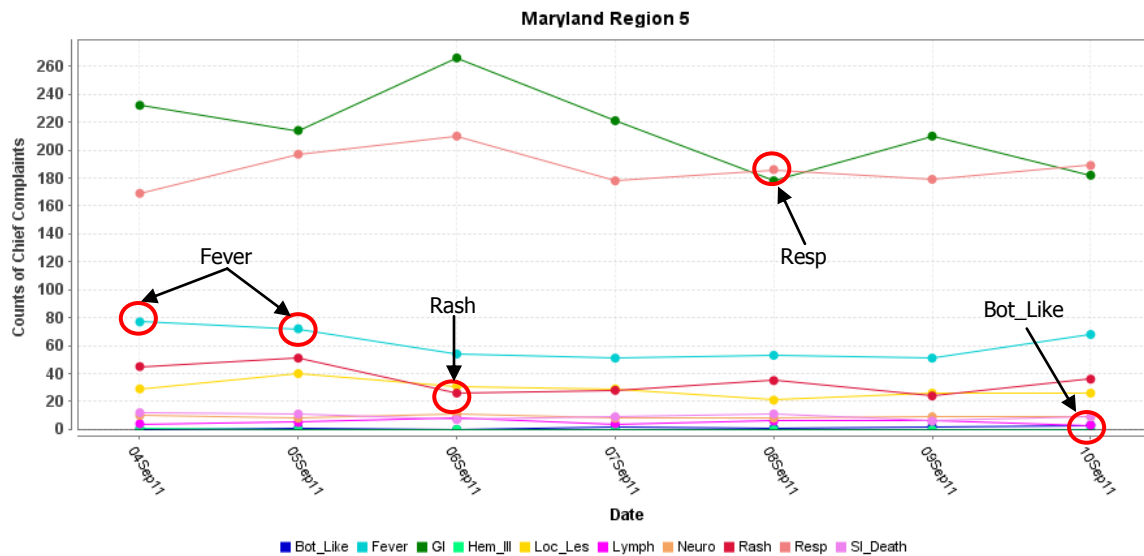
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

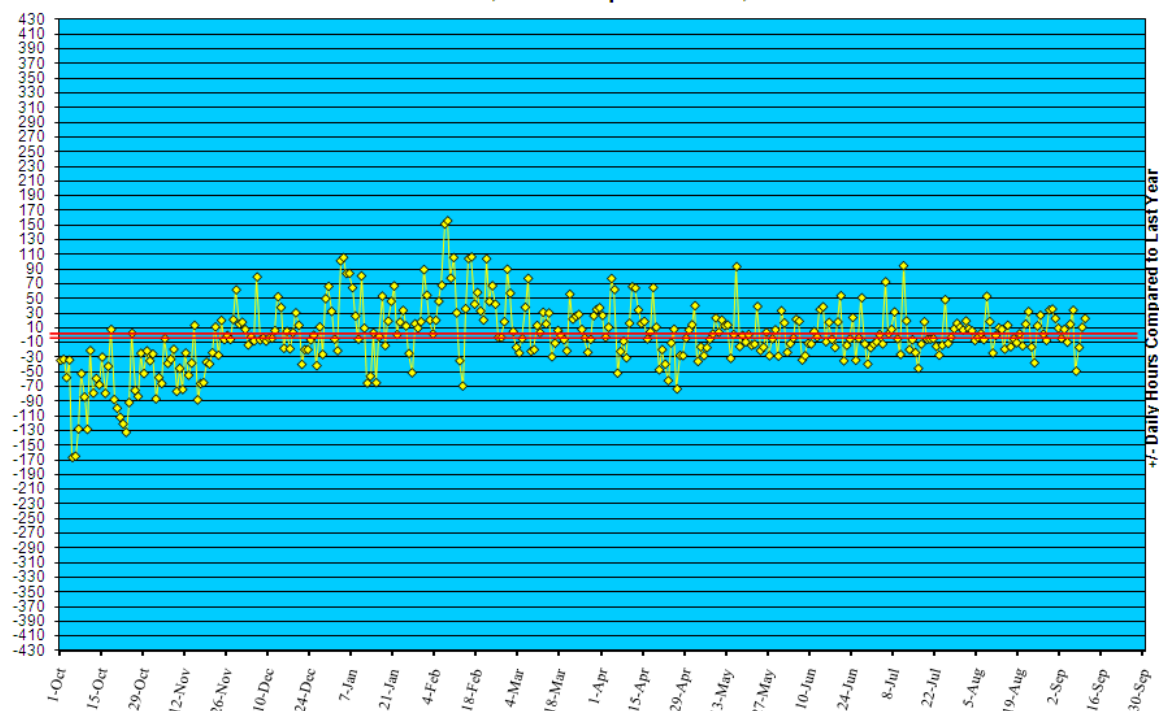


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to September 10, '11



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (September 4 – September 10, 2011):	11	0
Prior week (August 28 – September 3, 2011):	17	0
Week#36, 2010 (September 5 – September 11, 2010):	21	0

1 outbreak was reported to DHMH during MMWR week 36 (September 4 – September 10, 2011).

1 outbreak of GASTROENTERITIS associate with a Swim Club

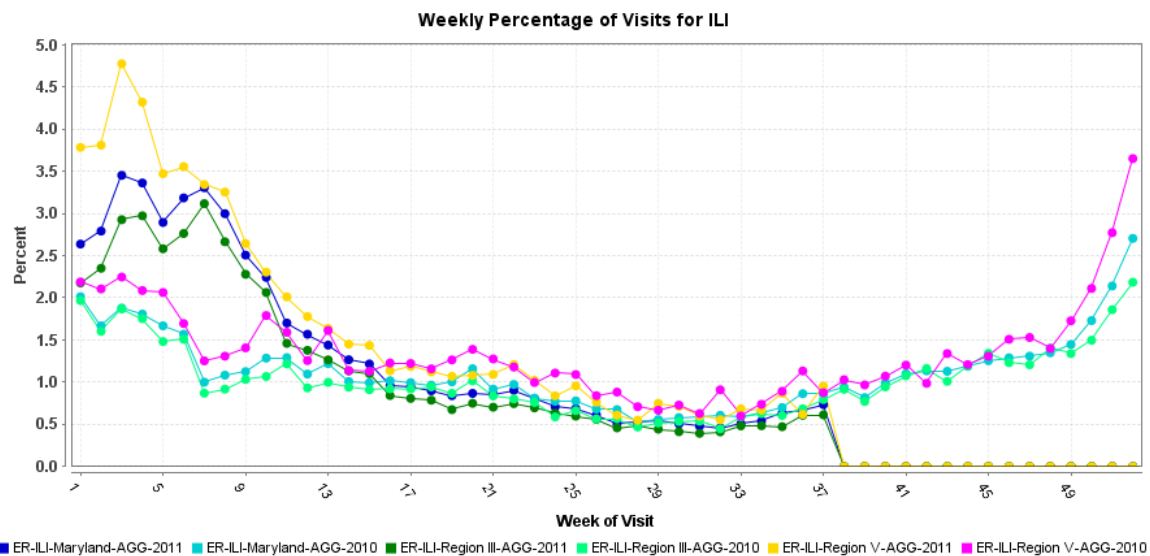
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

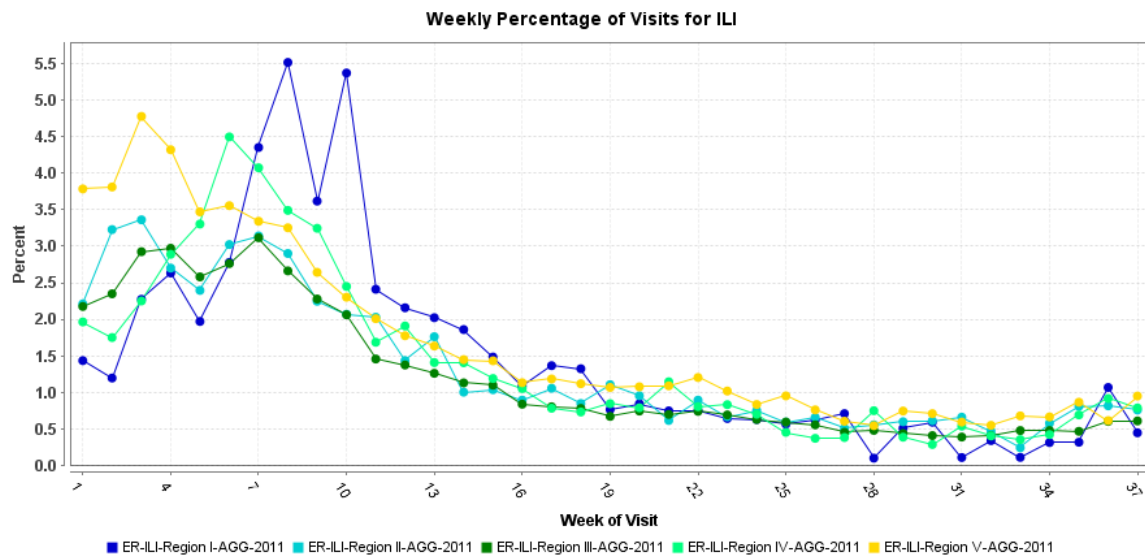
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



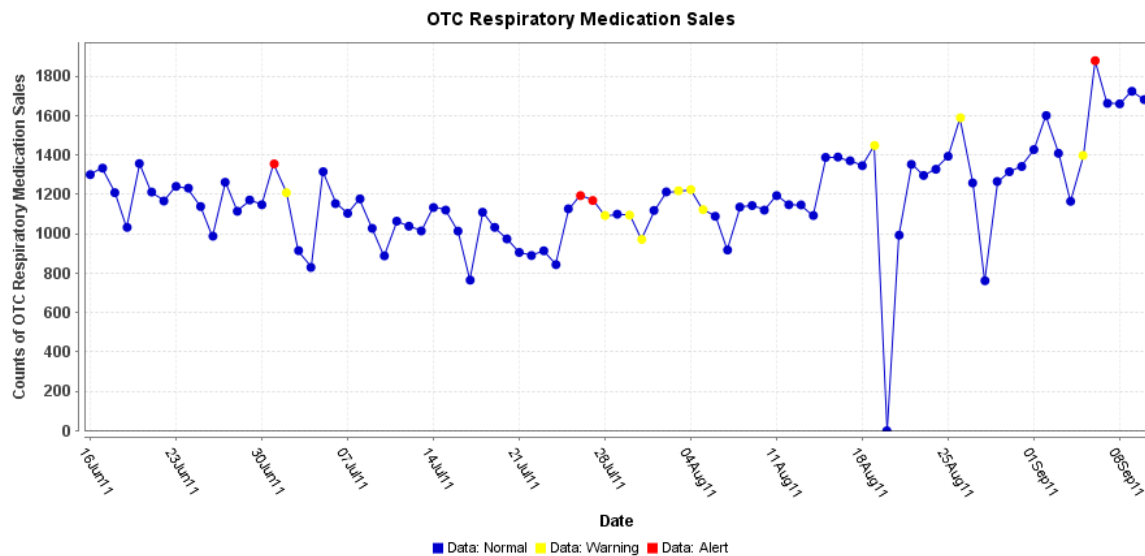
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

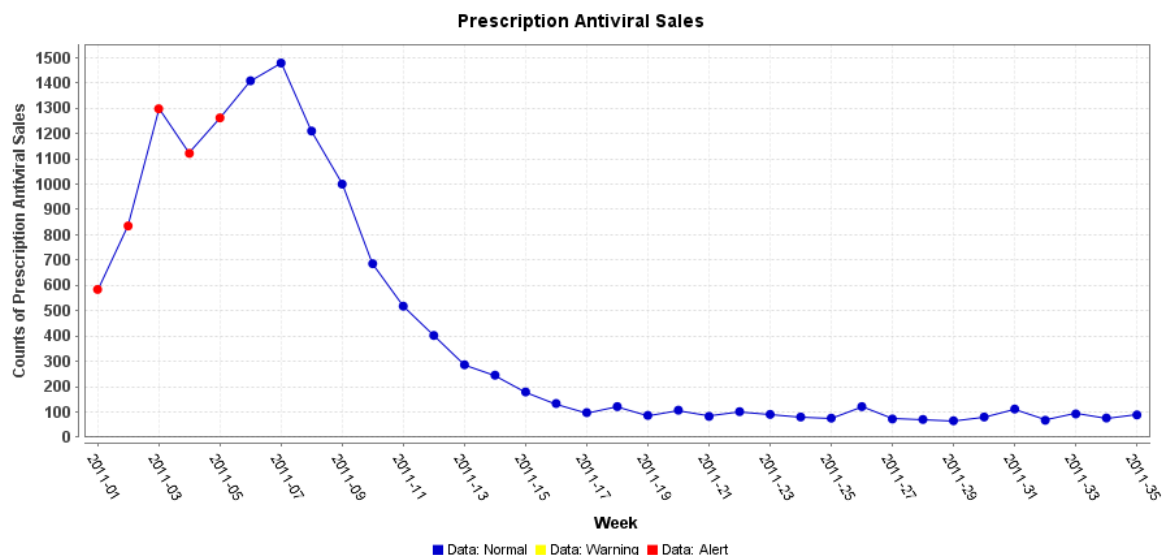
OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of September 16, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 564, of which 330 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (INDIA): 8 September 2011, The FAO today [29 Aug 2011] urged heightened readiness and surveillance against a possible major resurgence of the H5N1 highly pathogenic avian influenza amid signs that a mutant strain of the deadly bird flu virus is spreading in Asia and beyond, with unpredictable risks to human health. The H5N1 virus has infected 565 people since it 1st appeared in 2003, killing 331 of them, according to WHO figures. The latest death occurred earlier this month [August 2011] in Cambodia, which has registered 8 cases of human infection this year [2011] -- all of them fatal. Since 2003, H5N1 has killed or forced the culling of more than 400 million domestic poultry and caused an estimated USD 20 billion of economic damage across the globe before it was eliminated from most of the 63 countries infected at its peak in 2006. However, the virus remained endemic in 6 nations, although the number of outbreaks in domestic poultry and wild bird populations shrank steadily from an annual peak of 4000 to just 302 in mid 2008. But outbreaks have risen progressively since [then], with almost 800 cases recorded in 2010-2011. At the same time, 2008 marked the beginning of renewed geographic expansion of the H5N1 virus both in poultry and wild birds. The advance appears to be associated with migratory bird movements, according to FAO chief veterinary officer Juan Lubroth. He said migrations help the virus travel over long distances, so that H5N1 has, in the past 24 months, shown up in poultry or wild birds in countries that had been virus-free for several years. "Wild birds may introduce the virus, but peoples' actions in poultry production and marketing spread it," Lubroth noted. Recently affected areas are to be found in Israel and the Palestinian Territories, Bulgaria, Romania, Nepal, and Mongolia. A further cause for concern, Lubroth said, is the appearance in China and Viet Nam of a variant virus apparently able to sidestep the defenses provided by existing [veterinary] vaccines. In Viet Nam, which suspended its springtime poultry vaccination campaign this year [2011], most of the northern and central parts of the country -- where H5N1 is endemic -- have been invaded by the new virus strain, known as H5N1 - 2.3.2.1. Viet Nam's veterinary services are on high alert and reportedly are considering a novel, targeted vaccination campaign this fall [2011]. Virus circulation in Viet Nam poses a direct threat to Cambodia, Thailand, and Malaysia as well as endangering the Korean peninsula and Japan further afield. Wild bird migration can also spread the virus to other continents. "The general departure from the progressive decline observed in

2004-2008 could mean that there will be a flare up of H5N1 this fall and winter [2011-12], with people unexpectedly finding the virus in their backyard," Lubroth said. The countries where H5N1 is still firmly entrenched -- Bangladesh, China, Egypt, India, Indonesia, and Viet Nam -- are likely to face the biggest problems, but no country can consider itself safe, he said. "Preparedness and surveillance remain essential," Lubroth underlined. "This is no time for complacency. No one can let their guard down with H5N1."

NATIONAL DISEASE REPORTS

LISTERIOSIS (USA): 7 September 2011, A new case of listeriosis was reported today, in addition to the 3 cases over the holiday [Labor Day] weekend [3-5 Sep 2011], bringing the total to 13 since 1 Aug 2011. Cases have been reported in Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, and Weld counties. 2 people died from listeriosis in August 2011 and the 11 others were hospitalized. In an earlier outbreak, in June 2011, 2 people diagnosed with the infection died. The cause of the most recent outbreak is still under investigation and there is no clear link between the cases, said Mark Salley, spokesman for the Colorado Department of Public Health and Safety. Colorado averages about 10 cases of listeriosis per year. State health officials are concerned about the sudden outbreak and have reissued warnings about eating undercooked hot dogs, meat spreads, soft cheeses, and smoked fish. Symptoms of listeriosis include fever and muscle aches, diarrhea, headache, stiff neck, confusion, convulsions, and it can cause complications with pregnant women. Listeriosis can be treated with antibiotics, but even with treatment some cases result in death. Those with weakened immune systems are at a higher risk and listeriosis rarely affects healthy people. Most of those sickened by the illness during this outbreak are between 38 and 90 years old, and the majority are older females. (Food Safety Threats are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BOTULISM (USA): 7 September 2011, The New Mexico Department of Health [NMDOH] has joined in the investigation of 3 heroin users hospitalized with what may be wound botulism. Botulism is a rare but potentially fatal illness, and wound botulism is caused by the toxin produced from a wound infected with a botulism bacterium. The 3 people are hospitalized in Texas and are believed to have used contaminated heroin. "All healthcare providers should maintain a high index of suspicion for botulism in any patient presenting with the signs and symptoms suggestive of the disease, particularly if they have a history of injection drug use," NMDOH secretary Dr Catherine D Torres said. The NMDOH is working on the investigation with colleagues in Texas and at the CDC. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

BRUCELLOSIS (CHINA): 4 September 2011, The dean and party secretary of the animal medical school at Northeast Agricultural University, Northeast China's Heilongjiang province, have been removed from their positions due to a group of staff and students being infected by a serious disease through the department's laboratory, China Youth Daily reported on Sat 3 Sep 2011. Earlier this year [2011], 27 students and a teacher were found infected with brucellosis, an infectious disease which can lead to significant incapacitation. They were sent to a local hospital for treatment. One student, a senior at the application technology department of the university, suffered from joint pain, fatigue, sweating and a high fever in January 2011. The symptoms were later diagnosed as brucellosis. "It was all due to the university's negligence that we were infected," he said. The senior student and another 29 students did a sheep anatomy experiment in a lab of the animal medical department on 19 Dec 2010. "The lab's equipment was in disarray, and the whole environment was unsanitary where we conducted the anatomy," the senior student recalled. (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX (ZAMBIA): 5 September 2011, Anthrax cases in Chama District, Eastern Province, have increased to 205 since the disease outbreak on 26 Aug 2011. Ministry of Health Acting spokesperson, Maximilian Bweupe, says 80 cases have been recorded since last week. Dr Bweupe has explained to MUVI TV that the disease is suspected to have been transmitted from hippos in the Luangwa River. He has further said that the ministry has set a task force to deal with the situation. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BOTULISM (FRANCE): 6 September 2011, A total of 8 serious cases of botulism in France have been detected, in the Vaucluse and the Somme, due to the green almond tapenade, manufactured in a traditional manner, the Department of Economics said on Mon 5 Sep 2011. The tapenade of green almonds was made in Cavaillon by a couple in their 60s in a shop, which was immediately closed. Services have never had the opportunity to inspect the small workshop in which the rules of hygiene were not met. The manufacturers did not have suitable sterilization equipment, said Secretary General of the Prefecture of Vaucluse on Tue 6 Sep 2011. No control system was implemented and the company, which has operated for years, had not been declared to the monitoring services. The couple used a "kind of washing machine," widely used in families. But it is generally a lack of sterilization of the preserves which is the source of botulism. Botulism is rare, but not exceptional in France where there are about 20 cases each year. Authorities are asking anyone who bought the product not to eat it, and to return it, if possible, to the place of purchase. Health authorities have also asked stores to withdraw, as a precaution, all the preserves produced in this establishment. The consignment consists of about 60 jars of homemade product branded "The delights of Marie-Claire" (Les delices de Marie-Claire) sold in grocery stores in Bouches-du-Rhone, de la Drome, du Var and Vaucluse. Of the 5 people hospitalized in Avignon, an octogenarian still under very intensive care, as his condition is life-threatening. The 3 young women of Somme, for their part were

placed under artificial respirator at the University Hospital of Amiens, the institution stating that their condition has "stabilized."
(Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS (UGANDA): 8 September 2011, Members of Parliament (MPs) yesterday issued an alert over an outbreak of brucellosis in different parts of the country. The legislators, particularly from Mbarara District, raised fears that the disease, which is transmitted from cattle to human beings, continues to ravage different parts of the country, and they called on government to intervene immediately. "The disease is being transmitted from cattle to human beings through consuming raw animal products. Let the ministry vaccinate our animals before it is too late," MP for Mbarara, Ms Emma Boona, said yesterday [7 Sep 2011]. Brucellosis is associated with the consumption of unpasteurised milk, ghee and cheese made from the milk of infected animals that include cattle and goats infected with the bacteria *Brucella melitensis*. Dr Francis Epatait (Ngora County) noted that the disease also causes infertility and abortions among human beings. "The effects are really grave and the government should act fast," he said. Dr Medard Bitekyerezo (Mbarara Municipality) noted that so many people suffering from the disease have been admitted into Mbarara hospitals and clinics. The Third Deputy Prime Minister, Gen. Moses Ali, promised to investigate the matter and take action. (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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